



IN THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning at page 17, line 23, with the following rewritten paragraph

The sequence data was then compared with amino acid sequences in searchable computer databases. Some sequences were found to be of particular interest:

- A1
- a) a 10 amino acid residue sequence from the N-terminus of pernin (sequence (a) above showed only homology with an 8- base anti-thrombin protein sequence (SEQ ID NO: 9) from the terrestrial leeches (data from US patent 5,455,181 Oct 3, 1995: sequence 10).

Please replace the paragraph beginning at page 20, line 5, with the following rewritten paragraph:

A2

A suite of non-specific primers called pUZ5 was synthesized by Gibco-BRL for the initial sequencing based on the N-terminal sequence of pernin. The general formula was GAY GGN GAR CAR TGY AAY GAY GGN CAR AA (SEQ ID NO: 10)

Where Y represents a pyrimidine base, R represents a purine base and N represents any one of the four-nucleotide bases. Sequencing was done, initially using pUZ5 and an oligo-dT based "bottom strand" primer from PCR amplified cDNA. Sequencing was done by dye-termination cycle sequencing using "BigDye" prism technology (Applied Biosystems Incorporated, USA) according to their instructions. Products were resolved on an ABI 377 automated sequencer. Following the initial sequencing of approximately 500 base pairs pernin-specific primers were constructed and used to complete the sequencing of the pernin gene.

Immediately after page 23 and before the first page of claims (page 24), if appropriate, please insert the enclosed pages identified as --Sequence Listing--. Please renumber the pages accordingly.

REMARKS

It is respectfully asserted that the sequence disclosure contained in the application now fully complies with the requirements set forth in 37 C.F.R. § 1.821 to § 1.825. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**